

**Request to Archive
With The National Centers for Environmental Information
For Climate Forecast System Operational v2 (CFSv2) Perturbed Members
Provided by NOAA/NWS/NCEP/EMC**

2016-03-17

This information will be used by NCEI to conduct an appraisal and make a decision on the request.

1. Who is the primary point of contact for this request?

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2. Name the organization or group responsible for creating the dataset.

NWS NCEP EMC/CPC

3. Provide an overview summarizing the scope of data you want to archive. Describe the outputs, data variables, including their measurement resolution and coverage.

The Climate Forecast System Operational v2 (CFSv2) system is a coupled atmospheric-ocean-land-sea-ice model that contains 6-hourly forecasts, and seasonal 45-day and 9-month output in GRIB format. The data is already described as part of the original Submission Agreement (SA) of 2009/10. This request is an extension of the at request. It is 0.5, 1.0 and 2.5 degree data on a global scale. These data stopped being ingested in March 2011. This is the point where the dataset transitions from the "CFS Reanalysis" to the CFS Operational" dataset.

The operational forecast since 2011 contains UNPERTURBED, four-times-daily, 9-month control runs, consisting of all 6-hourly PGB, OCN, FLX, and IPV files, and the monthly means and time-series files; and 45-day and seasonal PERTURBED forecasts. The 9-month forecasts are currently being archived. This request is for archiving the PERTURBED forecasts in the ensemble which consist of the same type of files as the 9-month runs, but just shorter forecast lengths. There are (3) seasonal runs produced each day and (9) 45-day forecasts produced each day. The combination of the 45-day and seasonal runs amount to approximately 64TB/year of volume.

4. What is the time period covered by the dataset? (YYYY-MM-DD, YYYY-MM or YYYY)

From 2011-04-01
Ongoing as continuous updates to the data record

5. Edition or version number(s) of the dataset:

v2

6. Approximate date when the dataset was or will be released to the public:

2016-05-01

7. Who are the expected users of the archived data? How will the archived data be used?

These are highly processed model output using satellite, radar and surface observation data. Output is produced on native and gaussian grids, and written to WMO standard grib grids.

8. Has the dataset undergone user evaluation and/or an independent review process? Did NCEI participate in design reviews?

NOAA Science Advisory Board, NWS TAFF's, NOAA Operational / Reanalysis Steering group

9. Describe the dataset's relationship to other archived datasets, such as earlier versions or related source data. If this is a new version, how does it improve upon the previous version(s)?

Part of the data in this request is for a continuation of the CFS Reanalysis and Reforecast labeled as operational CFSv2 since it is an on-going product at NCEP.

10. List the input datasets and ancillary information used to produce the data.

See CFSv2 documentation on data assimilation.

11. List web pages and other links that provide information on the data.

Metadata follows WMO Standards in GRIB2 format

12. List the kinds of documents, metadata and code that are available for archiving. For example, data format specifications, user guides, algorithm documentation, metadata compliant with a standard such as ISO 19115, source code, platform/instrument metadata, data/process flow diagrams, etc.

1. <http://cfs.ncep.noaa.gov/cfsr/docs/>
2. <http://nomads.ncdc.noaa.gov/data.php?name=access#cfs>
3. CFSRR SA between NCDC and NCEP

13. Indicate the data file format(s).

1. GRIB 2

14. Are the data files compressed?

No

15. Provide details on how the files are named and how they are organized (e.g., file_name_pattern_YYYYMM.tar in monthly aggregations).

Filenames will match the file format as described in the previous Operational CFSv2 SA

16. Explain how to access sample data files and/or a file listing for previewing. If it is not available now, when will it be available?

Earlier CFSRR data are available via NOMADS

17. What is the total data volume to be submitted?

Continuous Data: data volume rate for a continuous data production.

Total Data Volume Rate: 64TB per Year

Data File Frequency: 500000 per Year

Data Production Start: 2011-03-01

18. Are later updates, revisions or replacement files anticipated? If so, explain the conditions for submitting these additional data to the archive.

No additional updates, revisions or replacement data are anticipated.

19. Describe the server that will connect to the ingest server at NCEI for submitting the data.

Physical Location: College Park, MD

System Name: Zeus /HPSS

System Owner: NCEP/EMC

Additional Information: For Historical backlog data; Operational data from NCEP/NCO

20. What are the possible methods for submitting the data to NCEI? Select all that apply.

1. FTP PULL

21. Identify how you would like NCEI to distribute the data. Web access support depends on the resources available for the dataset.

1. User interface to order and stage data for download

2. Direct download links

3. Advanced web services (e.g., THREDDS Catalog Service)

22. Will there be any distribution, usage, or other restrictions that apply to the data in the archive?

No known constraints apply to the data.

23. Discuss the rationale for archiving the dataset and the anticipated benefits. Mention any risks associated with not archiving the dataset at NCEI.

This data is being heavily requested by the research and private sector community to improve both climate and weather forecasting for the U.S. It is also being requested to satisfy the Office of Atmospheric Research (OAR)'s research community.

24. Are the data archived at another facility or are there plans to do so? Please explain.

No

25. Is there an existing agreement or requirement driving this request to archive? Have you already contacted someone at NCEI?

No

26. Do you have a data management plan for your data?

Operational CFSv2 9-month forecast data are being archived at NCEI currently.

27. Have funds been allocated to archive the data at NCEI?

The funding is in a "pending" decision by OAR.

28. Identify the affiliated research project, its sponsor, and any project/grant ID as applicable.

NOMADS; the National Climate Model Archive (NCMA); the Climate Program Office (CPO), and OAR

29. Is there a desired deadline for NCEI to archive and provide access to the data?

No deadlines for archive or access.

30. Add any other pertinent information for this request.

None